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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/017,459

03/26/2001

Fritz Schwerfliger

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05/04/2004

EXAMINER

METZMAIER, DANIEL S

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 06/04/2004

Martha Ann Finnegan
Chief Intellectual Property Counsel, Cabot Corp.
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Examiner

Daniel S. Metzmaier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/12/04; 1/22/04; 2/9/04; & 11/26/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6, 7, 56-59, 62, 63, 67-69, 71, 76-115 and 117-119 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 7, 56-59, 62, 63, 67-69, 71, 76-115 and 117-119 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/308,888.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 01122004
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 2-4, 6-7, 56-59, 62-63, 67-69, 71, 76-115 and 117-119 are pending.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/308,888, filed on June 29, 2000.

Information Disclosure Statement

2. The information disclosure statement filed January 12, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Applicants assert that copies of said references are in the Parent Application or in copending application, 09/308,770. To the extent the references are in the parent application, the examiner is unable to locate said references at the time of this action. To the extent that said references are in copending application, 37 CFR 1.98(d), permits reliance on copies in the parent application but not copending application copies. The references already instantly of record have been crossed off as redundant. The newly cited references correspond to several of the copending applications listed in the IDS.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 2-4, 56-59, 62-63, 67-69, 71, 76-77, 86, 92, 94, 96-97, 104-106, 109, 115 and 117-119 are rejected under 35 U.S.C. 102(b) as being anticipated by BASF, WO 95/6617, as evidenced by Ziegler et al, US 5,738,801. BASF is a patent family member of Ziegler et al, US 5,738,801 as is evident from item [87] on the face of said US patent. The Ziegler et al is considered as a English language translation of the BASF reference. Although the rejection is based on the BASF reference, the citations referred will be to the Ziegler et al reference.

BASF (examples) discloses the formation of a hydrogel and displacement of the water present in the hydrogel with alcohol (also a known hydrophobic agent, which forms estersil groups on the surface of the silica gel), followed by drying to form a hydrophobic aerogel. Said process reads on the noted claims.

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BASF and Ziegler et al references (column 2, lines 40-41) teach pH values within the range of 7.5 to 11, which reads on the range 3 to 8.

5. Claims 2-4, 6, 56-58, 76-80, 86, 88, 91-92, 94, 97, 99-102, 104-106, 115 and 117-119 are rejected under 35 U.S.C. 102(a) as being anticipated by Hoechst, WO 97/03017, as evidenced by Schwertfeger et al, US 6,159,539. Hoechst is a patent family member of Schwertfeger et al, US 6,159,539, as is evident from item [87] on the face of said US patent. The Schwertfeger et al is considered as an English language translation of the Hoechst reference. Although the rejection is based on the Hoechst reference, the citations referred will be to the Schwertfeger et al reference. See claims and examples. For additives, see column 4, lines 48 et seq, and for pH of the initial charge for modification see column 4, lines 1-10.

6. Claims 2-4, 6, 56-58, 76-80, 86, 88, 91-92, 94, 97, 99-102, 104-106, 115 and 117-119 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwertfeger et al, US 6,159,539. See preceding rejection.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

7. Claims 2-4, 6, 56-58, 76-80, 86, 88, 91-92, 94, 97, 99-102, 104-106, 115 and 117-119 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the

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claimed subject matter. Schwertfeger et al, US 6,159,539, is directed to a different inventive entity. See preceding rejections regarding the basis and overcoming this rejection.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 87 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over BASF, WO 95/6617, as evidenced by Ziegler et al, US 5,738,801. BASF and Ziegler et al disclose (examples) forming hydrogels, hydrophobing and drying.

BASF and Ziegler et al differs from the claims in the use of a semi-continuous neutralization process and mineral acid employed.

The modification to a semi-continuous operation amounts to allowing for equilibrium and/or reaction of the materials prior to continuing the operations. Said modification is well within the ordinary skill level of the ordinary skilled artisan at the time of applicants' invention as would be apparent to those skilled in the chemical manufacturing arts.

The BASF and Ziegler et al references teach (column 2, lines 17-20) neutralization with mineral acid. While HCl is not specifically mentioned, it is one of the more commonly known mineral acids and would have been obvious to those having ordinary skill in the art at the time of applicants' invention.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 2-4, 6-7, 56-58, 62-63, 67-69, 71, 76-115 and 117-119 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6-24 of copending Application No. 09/308,770. Although the conflicting claims are not identical, they are not patentably distinct from

each other because the methods substantially overlap, the instant claimed methods and the copending methods both employ open transitional language, "comprising" and the generic terms "lyogel " and "hydrogel" further overlap.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

13. Applicant's arguments with respect to claims 2-4, 6-7, 56-59, 62-63, 67-69 and 71 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM